# **Instructions–Parts List**

### HIGH PRESSURE FLUID LINE Ball Valves, Check Valves, and Swivels



306861ZAF

ΕN



### Important Safety Instructions

Read all warnings and instructions in this manual. Save these instructions. See page 3 for a **List of Models**, including **Maximum Working Pressures**.

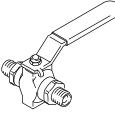








Model 262739

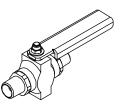


Model 210657, 26A068, 26A078

Model 238635



Model 206831



Model 239280



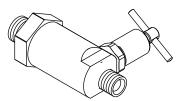




Model 214925



Model 16T481, 24S039



Model 25C189, 127631

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Graco Information	)

## **List of Models**

#### **Two Way Director Valve**

5000 psi (35 MPa, 350 bar) Maximum Working Pressure

Part No.	Series	Thread Size	Seals
214711	А	1/4 npt(mbe)	fluoroelastomer

#### **One Way Ball Valves**

7400 psi (51 MPa, 510 bar) Maximum Working Pressure

Part No.	Series	Thread Size	Seals
237303	A	1/4 npt(mbe)	PTFE with PEEK seat
237304	A	3/8 npt(mbe)	PTFE with PEEK seat
245860	A	3/8 npt(mbe)	PTFE with PEEK seat
245861	A	3/8 npt(mbe)	PTFE with PEEK seat
248875	A	1/4 npt(mbe)	PTFE with PEEK seat
248876	A	3/8 npt(mbe)	PTFE with PEEK seat

#### One Way Ball Valves, Heavy Duty, Stainless Steel

7250 psi (50 MPa, 500 bar) Maximum Working Pressure

Part No.	Series	Thread Size	Seals
262739	A	1/2 npt(fbe)	PTFE with PEEK seat
262740	А	1/2 npt(fbe)	PTFE with PEEK seat

#### One Way Ball Valves, Heavy Duty

5000 psi (35 MPa, 350 bar) Maximum Working Pressure

Part No.	Series	Thread Size	Seals
235573	В	3/8 npt(m) one end	fluoroelastomer with Carbide seat
237469	A	3/8 npt(m) x 1/4 npt(m)	fluoroelastomer with Carbide seat
238967	С	3/8 npt(m) x 3/8 npt(m)	PTFE with PEEK seat
239280	А	1/4 npt(m) x 1/4 npt(m)	fluoroelastomer with Carbide seat

# **List of Models**

#### **One Way Ball Valves**

5000 psi (35 MPa, 350 bar) Maximum Working Pressure

Part No.	Series	Thread Size	Seals
210657	В	1/4 npt(mbe)	fluoroelastomer
210658	В	3/8 npt(mbe)	fluoroelastomer
210659	В	3/8 x 1/4 npt(mbe)	fluoroelastomer
214037	В	1/4 npt(mbe)	PTFE
218901	A	1/4 nps(m) x 3/4 unf–2a	PTFE
223959	A	3/8 x 1/4 npt(mbe)	PTFE
223960	A	3/8 npt(mbe)	PTFE
224441	A	3/8 npt(m) one end	fluoroelastomer
235992	A	3/8 x 1/4 npt(mbe)	PTFE, sst
238612	A	3/8 npt(mbe)	fluoroelastomer
238635	A	1/4 npt(mbe)	fluoroelastomer
238694	A	3/8 npt(mbe)	PTFE, sst
239018	A	1/4 npt(mbe)	PTFE, sst
240410	A	3/8 npt(mbe)	PTFE, sst
240411	A	1/4 npt(mbe)	PTFE, sst
248271	A	1/4 npt(mbe)	PTFE, sst
24F607	A	3/8 npt(mbe)	Flouroelastomer
26A068	A	3/8 x 1/4npt(mbe)	PTFE, SST
26A078	A	1/4 npt(mbe)	PTFE, SST

# **List of Models**

#### Swivels

7400 psi (51 MPa, 510 bar) Maximum Working Pressure

Part No.	Series	Thread Size	Seals
236987	В	1/4 npsm(f) x 1/4 npsm(m) swivel	PTFE

#### Swivels

5000 psi (35 MPa, 350 bar) Maximum Working Pressure

Part No.	Series	Thread Size	Seals
214925	-	3/8 npt(f) x 1/4 npsm(f) swivel	Leather
214926	-	3/8 npt(f) x 1/2 npsm(f) swivel	Leather

### **Check Valves**

3000 psi (21 MPa, 210 bar) Maximum Working Pressure

Part No.	Series	Thread Size	Seals
206831	-	3/8 npt(m) x 3/8 npsm(f) swivel	Nitrile rubber
206833	-	3/8 npt(m) x 3/8 npsm(f) 90° swivel	Nitrile rubber
206962	_	3/8 npt(mbe)	Nitrile rubber

#### **Check Valves**

7250 psi (50 MPa, 500 bar) Maximum Working Pressure

Part No.	Series	Thread Size	Ball/Seat	Housing
16T481	-	3/4 npt(f) x 3/4 npt(f)	SST/Carbide	Carbon Steel
24S039	-	3/4 npt(f) x 3/4 npt(f)	SST/Carbide	Stainless Steel
127631	В	3/4 npt(m) x 1/2 npt(m)	SST/Carbide	Carbon Steel
25C189	_	1/2 npt(m) x 1/2 npt(m)	SST/Carbide	Carbon Steel

#### Swivels

3600 psi (25 MPa, 250 bar) Maximum Working Pressure

Part No.	Series	Thread Size	Seals
239663	-	1/4 npt(m) x 1/4 npsm(f) swivel	Leather
223341	В	1/4 npt(m) x 1/4 npsm(f) swivel	PTFE

# Symbols

### Warning Symbol

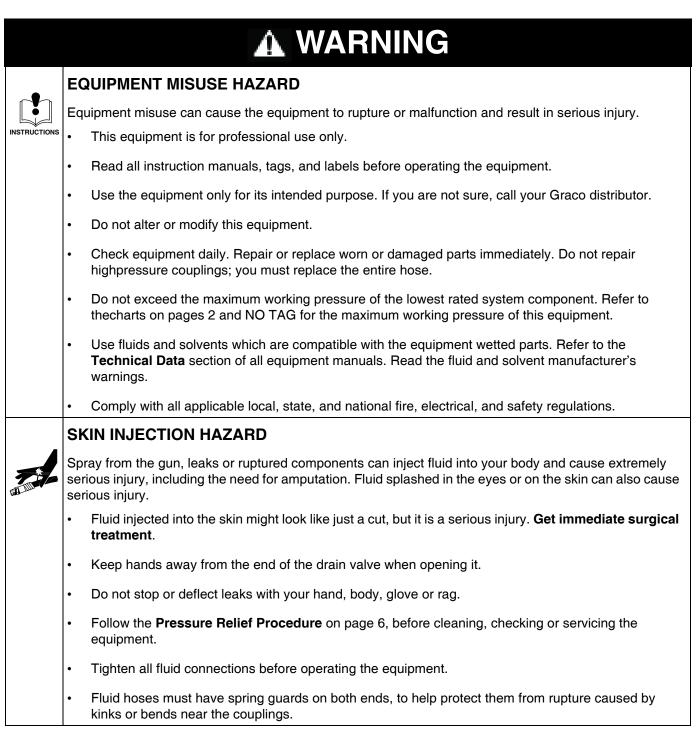
### 🛦 WARNING

This symbol alerts you to the possibility of serious injury or death if you do not follow the instructions.

### **Caution Symbol**



This symbol alerts you to the possibility of damage to or destruction of equipment if you do not follow the instructions.



# **Ball Valve Operation/Service**

### **Pressure Relief Procedure**

### A WARNING

#### SKIN INJECTION HAZARD

The system pressure must be manually relieved to prevent the system from starting or spraying accidentally. Fluid under high pressure can be injected

through theskin and cause serious injury. To reduce the risk of an injury from injection, splashing fluid, or moving parts, follow the **Pressure Relief Procedure** whenever you:

- · are instructed to relieve the pressure,
- stop dispensing,
- · check or service any of the system equipment,
- or install or clean dispensing devices.
- 1. Engage the spray gun safety latch and any other equipment safety locks.
- 2. Turn off the power to the pump.
- 3. Disengage the gun safety latch and trigger the spray gun to relieve pressure.
- 4. Engage the spray gun safety latch and slowly open the system drain valve(s). Keep hands away from the end of the drain valve when opening it.
- 5. Leave the drain valve(s) open until you are ready to use the system again.

### A WARNING

Two-way director valves must be used only as ON/OFF valves. Never use them to "throttle" fluid flow, as this causes rapid wear of the valve. A worn valve may leak or fail to stay in the position (opera-te/drain) that you set it, unexpectedly allowing high pressure fluid into the closed off part of the system.This hazard can result in fluid injection or splashing in the eyes or on the skin.

If the valve leaks fluid into the closed off part of the system, or if the valve handle is loose or does not hold its position firmly, replace the valve immedi-ately.

### **Two-Way Director Valve**

The two-way director valve is used to direct high pressure fluids in either of two directions. It is commonly used in heated circulating systems to bleed trapped air and to direct unused, heated fluids back to the pump. It can also be used in multiple gun installations.

Connect the fluid line to the 1/4 in. npt(m) inlet (marked "IN"). Direct the fluid to either outlet by turning the lever in the direction desired for flow.

#### **One-Way Valves**

The one-way valves are used as drain valves to relieve fluid pressure in spray systems. To open the valve, turn the lever parallel to the valve housing. To fully stop fluid flow through the valve, turn the lever 90° to the valve housing.

### Valve Service

Follow the **Pressure Relief Procedure** at left. Remove the valve from the line and disassemble it. Clean the parts and inspect them for wear or damage. Replace them as necessary.

### 

Do not wash fluoroelastomer o-rings in ketone thinners as these thinners cause the o-rings to deteriorate.

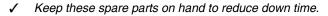
Lubricate the o-ring seals and threaded parts with lithium base lubricant. Assemble the valve in the reverse order of disassembly (refer to the parts drawing for your model). When installing the lever on the valve, make sure the hole in the ball is aligned with the direction of the lever.

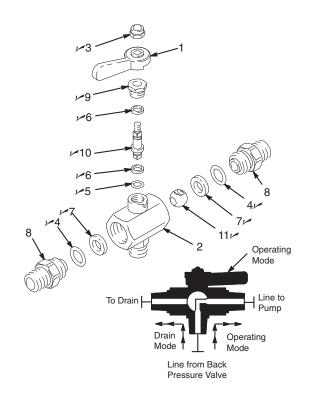
## **Two Way Valve Parts**

#### Model 21471

5000 psi (35 MPa, 350 bar) Maximum Working Pressure 1/4 npt(mbe), fluoroelastomer seals

REF	PART		
NO.	NO.	DESCRIPTION	QTY
1	206970	LEVER, valve	1
2	214710	HOUSING, valve	1
37	102310	NUT, hex; nylon cap; No. 10–32	1
		SEAL, o-ring; fluoroelastomer	2
4√	110241	standard	_
- /	104892	SEAL, o-ring; PTFE <i>optional</i>	2
5√	110242	SEAL, o-ring; fluoroelastomer	
		standard	1
	104893	SEAL, o-ring; PTFE <i>optional</i>	1
6√	164900	WASHER, flat, nylon	2
7√	172094	SEAT, ball, nylon	2
8	165274	STUD, valve; 1/4 npt(m)	2
9√	165964	NUT, packing	1
107	166696	STEM, valve	1
117	167008	BALL, valve	1





## **One Way Valve Parts**

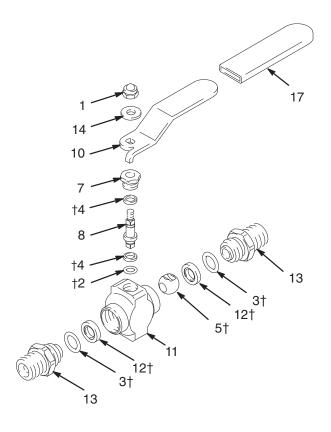
#### Model 238967, Series C

5000 psi (35 MPa, 350 bar) Maximum Working Pressure 3/8 npt(m) x 3/8 npt(m), PTFE seals, PEEK seat

#### REF PART

NO.	NO.	DESCRIPTION	QTY
1	102310	NUT, hex; nylon cap; No. 10–32	1
2†	104893	SEAL, o-ring; PTFE	1
3†	104892	SEAL, o-ring; PTFE	2
4†	164900	WASHER, flat, nylon	2
5† 7	188745	BALL, valve	1
7	165964	NUT, packing	1
8	188742	STEM, valve	1
10	190180	LEVER, valve	1
11	188828	HOUSING, valve	1
12†	190179	SEAT, ball	2
13	188743	NIPPLE, 3/8 npt(m)	2
14	112776	WASHER, flat	1
17	112907	GRIP, handle	1

*†* These parts are included in Repair Kit 240147, which may be purchased separately.



#### Model 237303, Series A

7400 psi (51 MPa, 510 bar) Maximum Working Pressure 1/4 npt(mbe); PTFE seals, PEEK seat

#### Model 237304, Series A

7400 psi (51 MPa, 510 bar) Maximum Working Pressure 3/8 npt(mbe), PTFE seals, PEEK seat

#### Model 245860, Series A

7400 psi (51 MPa, 510 bar) Maximum Working Pressure 3/8 npt(mbe), PTFE seals, PEEK seat

#### Model 245861, Series A

7400 psi (51 MPa, 510 bar) Maximum Working Pressure 3/8 npt(mbe), PTFE seals, PEEK seat

#### Model 248875, Series A

7400 psi (51 MPa, 510 bar) Maximum Working Pressure 1/4 npt(mbe); PTFE seals, PEEK seat

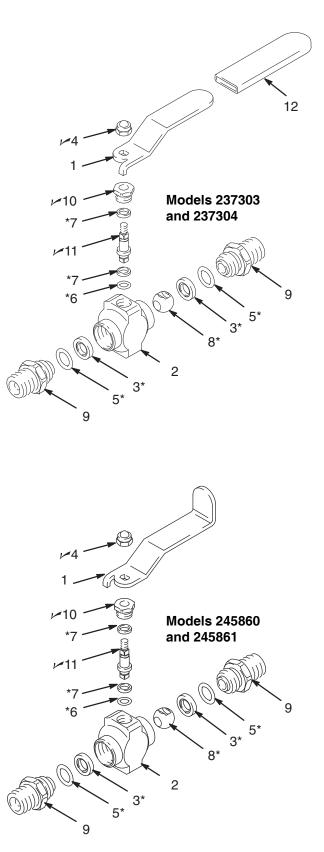
#### Model 248876, Series A

7400 psi (51 MPa, 510 bar) Maximum Working Pressure 3/8 npt(mbe), PTFE seals, PEEK seat, no lever

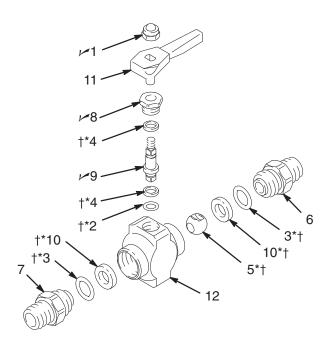
### REF PART

NO.	NO.	DESCRIPTION	QTY
1	190180	LEVER, valve, (Models 237303 and 237304)	1
	15A881	LEVER, valve, left hand (Model 245860, shown)	1
	15A882 178747	LEVER, valve, right hand LEVER, valve,	1 1
2	178743	<i>(Model 248875)</i> HOUSING, valve	1
3* 4√	190179 102310	SEAT, ball, PEEK NUT, hex; nylon cap; No. 10–32	2
5*	104892	(not on 248876) SEAL, o-ring; PTFE	1 2
6* 7*	104893	SEAL, o-ring; PTFE	1
7 8*	164900 178746	WASHER, flat, nylon BALL, valve	2 1
9	165274	STUD, valve; 1/4 npt(m) Models 237303 and 248875	2
	165599	STUD, valve; 3/8 npt(m) (Models 237304, 245860, 245861	-
		and 248876)	2
10√ 11√	165964 178745	NUT, packing STEM, valve	1 1
12	112907	GRIP, handle	1
		(Models 237303 and 237304 only)	1

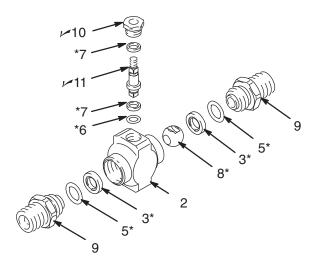
\* These parts are included in Repair Kit 237917, which may be purchased separately.



Model 248875



Model 248876



Model 238612, Series A 5000 psi (35 MPa, 350 bar) Maximum Working Pressure 3/8 npt(mbe), fluoroelastomer seals Model 238635, Series A

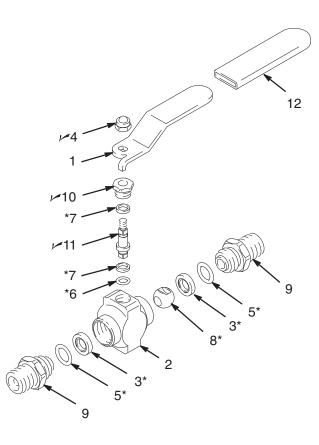
5000 psi (35 MPa, 350 bar) Maximum Working Pressure 1/4 npt(mbe), fluoroelastomer seals

#### **REF PART**

NO.	NO.	DESCRIPTION	QTY
1	190180	LEVER, valve	1
2	178743	HOUSING, valve	1
3*	172094	SEAT, ball, nylon	2
47	102310	NUT, hex; nylon cap; No. 10–32	1
5*	110241	SEAL, o-ring; fluoroelastomer	2
6*	110242	SEAL, o-ring; fluoroelastomer	1
7*	164900	WASHER, flat, nylon	2
8*	178746	BALL, valve	1
9	165599	STUD, valve; 3/8 npt(m) Model 238612	2
	165274	STUD, valve; 1/4 npt(m) Model 238635	
107	165964	NUT, packing	1
117	178745	STEM, valve	1
12	112907	GRIP, handle	1

These parts are included in Repair Kit 217559, which may be purchased separately.

Keep these spare parts on hand to reduce down time.



Model 262739, Series A (Includes Handle) 7250 psi (50 MPa, 500 bar) Maximum Working Pressure 1/2 npt (fbe), PTFE seals, PEEK seats, stainless steel

#### Model 262740, Series A (No Handle)

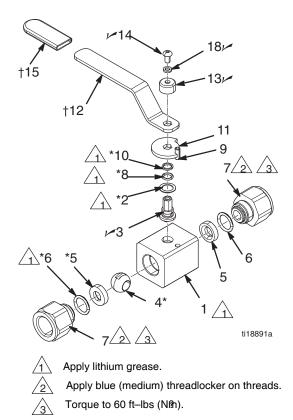
7250 psi (50 MPa, 500 bar) Maximum Working Pressure 1/2 npt(fbe), PTFE seals, PEEK seats, stainless steel

#### **REF PART**

NO.	NO.	DESCRIPTION	QTY
1	16K986	HOUSING, ball valve, 1/2 in., sst	1
2*	16M175	RING, packing, valve, acetal	1
3	16M165	STEM, valve, ball, 1/2 npt, sst	1
4*	16M199	BALL, valve, 3/4, sst chrome	1
5*	16M174	SEAT, ball, valve, 1/2 npt, sst	1
6	867370	O-RING, seal, PTFE, 114	2
7	16M161	CAP, end, valve, 1/2 npt, sst	2
8*	113137	PACKING, o-ring; solvent resistant	2
9	107090	PIN, spring, straight	1
10*	126021	RING, backup; PTFE	1
11	16K988	STOP, handle; sst	1
12†	16K989	HANDLE, 1/2 in. ball valve; sst	1
13	16K987	CAP, locking; sst	1
14	551787	SCREW, 10–32 x 3/8 IN., sst	1
15†	112907	GRIP, handle; yellow	1
18	551788	WASHER, lock, split #10 sst	1

Included in 262739 only. †

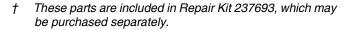
These parts are included in Repair Kit 24M601, which may be purchased separately.

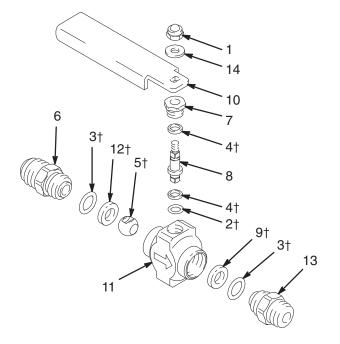


#### Model 237469, Series A

5000 psi (35 MPa, 350 bar) Maximum Working Pressure 3/8 npt(m) x 1/4 npt(m), fluoroelastomer seals, carbide seat

REF	PART		
NO.	NO.	DESCRIPTION	QTY
1	102310	NUT, hex; nylon cap; No. 10–32	1
2†	110242	SEAL, o-ring; fluoroelastomer	1
3†	110241	SEAL, o-ring; fluoroelastomer	2
4†	164900	WASHER, flat, nylon	2
5†	190079	BALL, valve	1
6	190081	STUD, valve; 3/8 npt(m)	1
7	165964	NUT, packing	1
8	187163	STEM, valve	1
9†	223521	SEAT, ball, carbide	1
10	190083	LEVER, valve	1
11	178743	HOUSING, valve	1
12†	172094	SEAT, ball	1
13	190338	NIPPLE, 1/4 npt(m)	1
14	112776	WASHER, flat	1





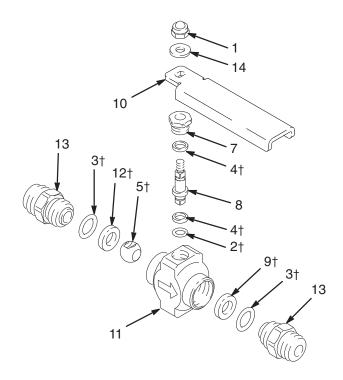
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#### Model 239280, Series A

5000 psi (35 MPa, 350 bar) Maximum Working Pressure 1/4 npt(m) x 1/4 npt(m), fluoroelastomer seals, carbide seat

NO.	NO.	DESCRIPTION	QTY
1	102310	NUT, hex; nylon cap; No. 10–32	1
2†	110242	SEAL, o-ring; fluoroelastomer	1
3†	110241	SEAL, o-ring; fluoroelastomer	2
4†	164900	WASHER, flat, nylon	2
5†	190079	BALL, valve	1
7	165964	NUT, packing	1
8	187163	STEM, valve	1
9†	223521	SEAT, ball, carbide	1
10	190083	LEVER, valve	1
11	178743	HOUSING, valve	1
12†	172094	SEAT, ball	1
13	190338	NIPPLE, 1/4 npt(m)	2
14	112776	WASHER, flat	1

These parts are included in Repair Kit 237693, which may † be purchased separately.



#### Model 210657, Series B

5000 psi (35 MPa, 350 bar) Maximum Working Pressure 1/4 npt(mbe), fluoroelastomer seals

### Model 210658, Series B; Model 24F607, Series A 5000 psi (35 MPa, 350 bar) Maximum Working Pressure

3/8 npt(mbe), fluoroelastomer seals

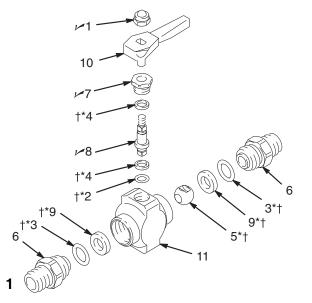
#### Model 223960, Series A

5000 psi (35 MPa, 350 bar) Maximum Working Pressure 3/8 npt(mbe), PTFE seals

#### **REF PART**

NO.	NO.	DESCRIPTION	QTY
1	102310	NUT, hex; nylon cap; No. 10–32	1
2	110242†	SEAL, o-ring; fluoroelastomer	
		Models 210658 & 210657	1
	104893*	SEAL, o-ring; PTFE Model 223960	1
3	110241†	SEAL, o-ring; fluoroelastomer	
		Models 210658 & 210657	2
	104892*	SEAL, o-ring; PTFE Model 223960	2
4	164900*†	WASHER, flat, nylon	2
5	178746*†	BALL, valve	1
6	165274	STUD, valve; 1/4 npt(m)	
		Model 210657	2
	165599	STUD, valve; 3/8 npt(m)	
		Model 210658 & 223960 only	2
	16F448	STUD, valve, 3/8 npt(m) nickel plated	
		Model 24F607	2
7	165964🗸	NUT, packing	2
8	178745🗸	STEM, valve	1
9	172094*†	SEAT, ball, nylon	2
10	178747	LEVER, valve	1
11	178743	HOUSING, valve	
		Models 210657, 210658, 223960	1
	16F447	HOUSING, valve, nickel plated	
		Model 24F607	2

- \* These parts are included in Repair Kit 217560, which may be purchased separately.
- These parts are included in Repair Kit 217559, which may t be purchased separately.
- Keep these spare parts on hand to reduce down time. 1



#### Model 210659, Series B

5000 psi (35 MPa, 350 bar) Maximum Working Pressure 3/8 npt(m) x 1/4 npt(m), fluoroelastomer seals

#### Model 223959, Series A

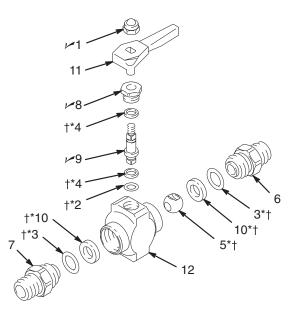
5000 psi (35 MPa, 350 bar) Maximum Working Pressure 3/8 npt(m) x 1/4 npt(m), PTFE seals

#### **REF PART**

NO.	NO.	DESCRIPTION	QTY
1	102310	NUT, hex; nylon cap; No. 10–32	1
2	110242†	SEAL, o-ring; fluoroelastomer Model 210659	1
	104893*	SEAL, o-ring; PTFE Model 223959	1
3	110241†	SEAL, o-ring; fluoroelastomer Model 210659	2
	104892*	SEAL, o-ring; PTFE Model 223959	2
4	164900*†	WASHER, flat, nylon	2
5	178746*†	BALL, valve	1
6	165274	STUD, valve; 1/4 npt(m)	1
7	165599	STUD, valve; 3/8 npt(m)	1
8	165964	NUT, packing	1
9	178745	STEM, valve	1
10	72094*†	SEAT, ball, nylon	2
11	178747	LEVER, valve	1
12	178743	HOUSING, valve	1

\* These parts are included in Repair Kit 217560, which may be purchased separately.

- These parts are included in Repair Kit 217559, which may t be purchased separately.
- Keep these spare parts on hand to reduce down time. 1



QTY

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#### Model 238694, Series A

5000 psi (35 MPa, 350 bar) Maximum Working Pressure 3/8 npt(mbe), PTFE seals, stainless steel

#### Models 235992, and 26A068 Series A

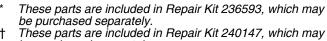
5000 psi (35 MPa, 350 bar) Maximum Working Pressure 3/8 npt(m) x 1/4 npt(m), PTFE seals, stainless steel

#### Models 248271, and 26A078 Series A

5000 psi (35 MPa, 350 bar) Maximum Working Pressure 1/4 npt(mbe), PTFE seals, stainless steel

#### **REF PART** NO. NO. DESCRIPTION 102310 NUT, hex; nylon cap; No. 10-32 1⁄ 2 104893\*† SEAL, o-ring; PTFE 3 104892\*† SEAL, o-ring; PTFE

164900*†	WASHER, flat, nylon
17K752	WASHER, flat, nylon Model 26A068,
	26A078
188745*†	BALL, valve
	STUD, valve
188744	1/4 npt(m)
17K751	1/4 npt(m) <i>Model 26A068, 26A078</i>
	STUD, valve
188743	3/8 npt(m) <i>Model</i> 238694
188744	1/4 npt(m) Model 235992, 248271
17K750	3/8 npt(m) <i>Model 26A068</i>
17K751	1/4 npt(m) <i>Model 26A078</i>
165964	NUT, packing
17K748	NUT, packing <i>Model 26A068, 26A078</i>
188742	STEM, valve
	SEAT, ball, nylon
190179†	Model 238694, 26A068, 26A078
172094*	Model 235992, 248271
178747	LEVER, valve
188828	HOUSING, valve
	17K752 188745*† 188744 17K751 188743 188743 188744 17K750 17K751 165964 17K748 188742 190179† 172094* 178747



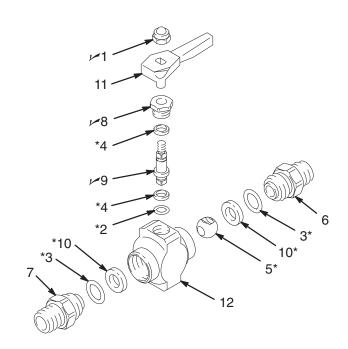
- † be purchased separately. Keep these spare parts on hand to reduce down time.
- 1

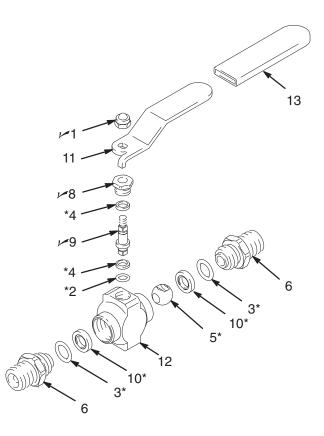
#### Model 239018, Series A

5000 psi (35 MPa, 350 bar) Maximum Working Pressure 1/4 npt(mbe), PTFE seals, stainless steel

REF PART				
NO.	NO.	DESCRIPTION	QTY	
17	102310	NUT, hex; nylon cap; No. 10–32	1	
2*	104893	SEAL, o-ring; PTFE	1	
3*	104892	SEAL, o-ring; PTFE	2	
4*	164900	WASHER, flat, nylon	2	
5*	188745	BALL, valve	1	
6	188744	STUD, valve; 1/4 npt(m)	2	
8√	165964	NUT, packing	1	
9√	188742	STEM, valve	1	
10*	172094	SEAT, ball, nylon	2	
11	190180	LEVER, valve	1	
12	188828	HOUSING, valve	1	
13	112907	GRIP, handle	1	

These parts are included in Repair Kit 236593, which maybe purchased separately.



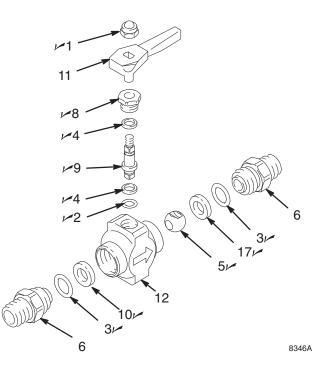


#### Model 240410, Series A

*5000 psi (35 MPa, 350 bar) Maximum Working Pressure* 3/8 npt(mbe), PTFE seals, carbide and PEEK seats, stainless steel

RE	F PART		
NO.	NO.	DESCRIPTION	QTY
1√	102310	NUT, hex; nylon cap; No. 10–32	1
2√	104893	SEAL, o-ring; PTFE	1
37	104892	SEAL, o-ring; PTFE	2
4√	164900	WASHER, flat, nylon	2
5√	193797	BALL, valve	1
6	188743	STUD, valve; 3/8 npt(m)	2
87	165964	NUT, packing	1
9√	193798	STEM, valve	1
107	<b>′</b> 190179	SEAT, ball, PEEK	1
11	178747	LEVER, valve	1
12	188828	HOUSING, valve	1
17.	223521	SEAT, ball, carbide	1

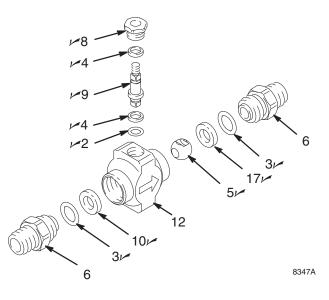
✓ Keep these spare parts on hand to reduce down time.



#### Model 240411, Series A

5000 psi (35 MPa, 350 bar) Maximum Working Pressure 1/4 npt(mbe), PTFE seals, carbide and PEEK seats, seats, stainless steel, without handle

REF PART				
	NO.	NO.	DESCRIPTION	QTY
	2√	104893	SEAL, o-ring; PTFE	1
	37	104892	SEAL, o-ring; PTFE	2
	4√	164900	WASHER, flat, nylon	2
	5√	193797	BALL, valve	1
	6	188744	STUD, valve; 1/4 npt(m)	2
	87	165964	NUT, packing	1
	9√	193798	STEM, valve	1
	107	190179	SEAT, ball, PEEK	1
	12	188828	HOUSING, valve	1
	177	223521	SEAT, ball, carbide	1



Model 218901, Series A 5000 psi (35 MPa, 350 bar) Maximum Working Pressure 1/4 npsm(m) x 3/4-16 unf-2a, PTFE seals

REF PART				
NO.	NO.	DESCRIPTION	QTY	
1	178747	LEVER, valve	1	
2	178743	HOUSING, valve	1	
3*	172094	SEAT, ball, nylon	2	
47	102310	NUT, hex; nylon cap; No. 10–32	1	
5*	104892	SEAL, o-ring; PTFE	2	
6*	104893	SEAL, o-ring; PTFE	1	
7*	164900	WASHER, flat, nylon	2	
8*	178746	BALL, valve	1	
9	181038	NIPPLE, adapter; 3/4–16 unf–2a(m)	1	
107	165964	NUT, packing	1	
117	178745	STEM, valve	1	
12	181037	NIPPLE, adapter; 1/4–18 npsm(m)	1	

\* These parts are included in Repair Kit 217560, which may be purchased separately.

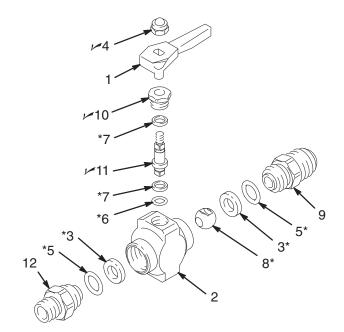
✓ Keep these spare parts on hand to reduce down time.

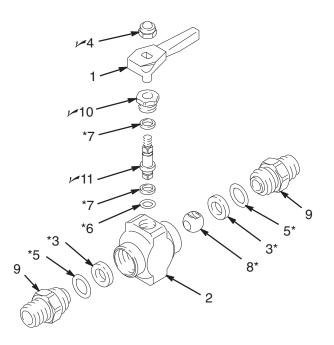
#### Model 214037, Series B

5000 psi (35 MPa, 350 bar) Maximum Working Pressure 1/4 npt(mbe), PTFE seals

REF PART				
NO.	NO.	DESCRIPTION	QTY	
1	178747	LEVER, valve	1	
2	178743	HOUSING, valve	1	
3*	172094	SEAT, ball, nylon	2	
47	102310	NUT, hex; nylon cap; No. 10–32	1	
5*	104892	SEAL, o-ring; PTFE	2	
6*	104893	SEAL, o-ring; PTFE	1	
7*	164900	WASHER, flat, nylon	2	
8*	178746	BALL, valve	1	
9	165274	STUD, valve; 1/4 npt(m)	2	
107	165964	NUT, packing	1	
111	178745	STEM, valve	1	

These parts are included in Repair Kit 217560, which may be purchased separately.





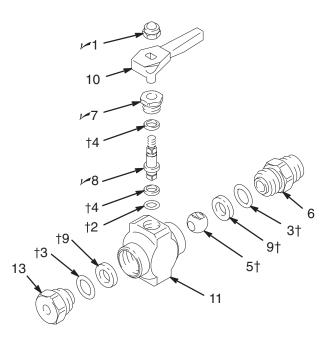
#### Model 224441

*5000 psi (35 MPa, 350 bar) Maximum Working Pressure* 3/8 npt(m) one end, fluoroelastomer seals

REF PART				
NO.	NO.	DESCRIPTION	QTY	
1⁄	102310	NUT, hex; nylon cap; No. 10–32	1	
2†	110242	SEAL, o-ring; fluoroelastomer	1	
3†	110241	SEAL, o-ring; fluoroelastomer	2	
4†	164900	WASHER, flat, nylon	2	
5†	178746	BALL, valve	1	
6	165599	STUD, valve; 3/8 npt(m)	1	
7√	165964	NUT, packing	1	
87	178745	STEM, valve	1	
9†	172094	SEAT, ball, nylon	2	
10	178747	LEVER, valve	1	
11	178743	HOUSING, valve	1	
13	186170	ADAPTER	1	

† These parts are included in Repair Kit 217559, which may be purchased separately.

✓ Keep these spare parts on hand to reduce down time.

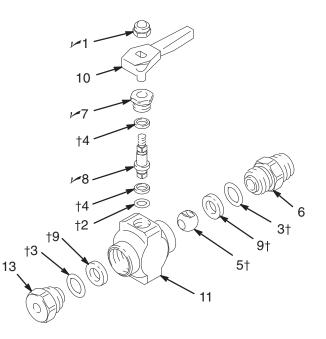


#### Model 235573

5000 psi (35 MPa, 350 bar) Maximum Working Pressure 3/8 npt(m) one end, fluoroelastomer seals, carbide seat

NO.	NO.	DESCRIPTION	QTY
17	102310	NUT, hex; nylon cap; No. 10–32	1
2†	110242	SEAL, o-ring; fluoroelastomer	1
3†	110241	SEAL, o-ring; fluoroelastomer	2
4†	164900	WASHER, flat, nylon	2
5†	165273	BALL, valve	1
6	165274	STUD, valve; 3/8 npt(m)	1
7√	165964	NUT, packing	1
8√	187163	STEM, valve	1
9†	172094	SEAT, ball, nylon	2
10	178747	LEVER, valve	1
11	178743	HOUSING, valve	1
13	186170	ADAPTER	1

- † These parts are included in Repair Kit 217559, which may be purchased separately.
- ✓ Keep these spare parts on hand to reduce down time.



# **Check Valve Parts**

**NOTE:** To operate properly, the valve must be mounted in an upright position with the housing (Ref No. 3, below) facing up.

### 

Do not wash nitrile o-rings in aromatic thinners as these thinners cause the o-rings to deteriorate.

#### Model 206831

3000 psi (21 MPa, 210 bar) Maximum Working Pressure 3/8 npt(m) x 3/8 npsm(f) swivel

#### **REF PART**

NO.	NO.	DESCRIPTION	QTY
1	206830	HOUSING, valve	1
2	101874	BALL, sst; 0.5 in. (13 mm) dia.	1
3	166700	HOUSING, adapter	1
4	166701	PIN	1
5√	166702	O-RING; nitrile rubber	1

✓ Keep these spare parts on hand to reduce down time.

#### Model 206833

3000 psi (21 MPa, 210 bar) Maximum Working Pressure 3/8 npt(m) x 3/8 npsm(f) 90° swivell

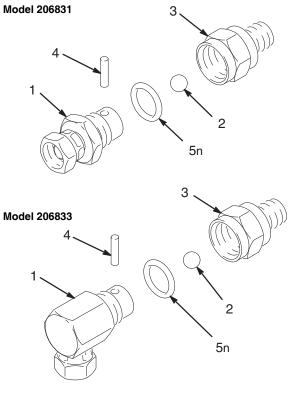
REF PART				
NO.	NO.	DESCRIPTION	QTY	
1	206832	HOUSING, valve	1	
2	101874	BALL, sst; 0.5 in. (13 mm) dia.	1	
3	166700	HOUSING, adapter	1	
4	166701	PIN	1	
5√	166702	O-RING; nitrile rubber	1	

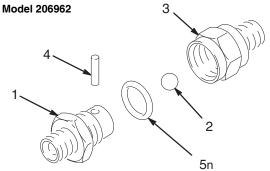
✓ Keep these spare parts on hand to reduce down time.

#### Model 206962

3000 psi (21 MPa, 210 bar) Maximum Working Pressure 3/8 npt(mbe)

REF PART				
NO.	NO.	DESCRIPTION	QTY	
1	206961	HOUSING, valve	1	
2	101874	BALL, sst; 0.5 in. (13 mm) dia.	1	
3	166700	HOUSING, adapter	1	
4	166701	PIN	1	
5√	166702	O-RING; nitrile rubber	1	

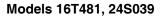


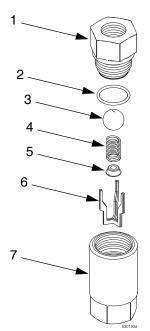


### **Check Valve Parts**

Models 16T481, 24S039 7250 psi (50 MPa, 500 bar) Maximum Working Pressure 3/4 npt(f) x 3/4 npt(f)

REF	PART		
NO.	NO.	DESCRIPTION	QTY
1	16T479	NUT, seat (Model 16T481)	1
	24S040	NUT, seat <i>(Model 24S039)</i>	1
2	102595	PACKING, o-ring	1
3	102972	BALL, metallic	1
4	108361	SPRING, compression	1
5	181535	RETAINER, spring (Model 16T481)	1
	17A621	RETAINER, spring (Model 24S039)	1
6	181492	GUIDE, ball (Model 16T481)	1
	17A619	GUIDE, ball <i>(Model 24S039)</i>	1
7	16T477	HOUSING, ball check (Model 16T481)	1
	17A617	HOUSING, ball check (Model 24S039)	1



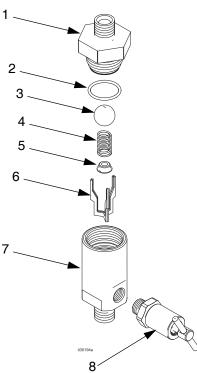


**Models 25C189, 127631** *7250 psi (50 MPa, 500 bar) Maximum Working Pressure* 1/2 npt(m) x 1/2 npt(m) Model 25C189 3/4 npt(m) x 1/2 npt(m) Model 127631

NO.	NO.	DESCRIPTION	QTY
1	127882	NUT, seat (includes 2* and 3)	1
		(Model127631)	
	25C190	NUT, seat (includes 2* and 3)	1
		(Model 25C189)	
2	102595	PACKING, o-ring	1
3	102972	BALL, metallic	1
4	108361	SPRING, compressor	1
5	181535	RETAINER, spring	1
6	181492	GUIDE, ball	1
7	17A091	HOUSING, ball check	1
8	245143	VALVE, pressure bleed	1

\* If the outlet check valve is disassembled, the o-ring (2) must be replaced. The o-ring is designed to be crushed, and not reused.

Models 25C189, 127631



### **Swivel Parts**

NOTE: For other high pressure swivels, see instruction manual 307005.

Model 239663 (series B) This swivel is not repairable 3600 psi (25 MPa, 250 bar) Maximum Working Pressure 1/4 npt(m) x 1/4 npsm(f) swivel, leather packings

Model 223341 (series B) This swivel is not repairable 3600 psi (25 MPà, 250 bar) Maximum Working Pressure 1/4 npt(m) x 1/4 npsm(f) swivel, PTFE packings

#### **REF PART**

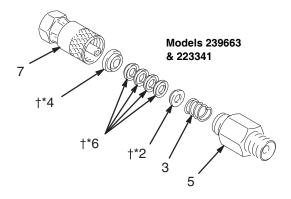
NO.	NO.	DESCRIPTION	QTY
2	150516*†	GLAND, male	1
3	150522	SPRING	1
4	157894*†	GLAND, female	1
5	188986	HOUSING, swivel	1
6	162694*	V-PACKING, leather (Model 239663)	4
	183978†	V-PACKING, PTFE (Model 223341)	4
7	-	BODY not sold separately	1

\* These parts are included in Repair Kit 207839, which may be purchased separately.

These parts are included in Repair Kit 223342, which may t be purchased separately.

**Model 214926** *This swivel is not repairable* 5000 psi (35 MPa, 350 bar) Maximum Working Pressure 1/2 npsm(f) x 3/8 npt(f), leather packings.

Model 214925 This swivel is not repairable 5000 psi (35 MPa, 350 bar) Maximum Working Pressure 1/4 npsm(f) x 3/8 npt(f), leather packings.



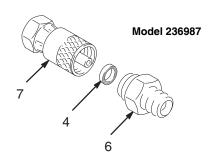


#### Model 236987

7400 psi (51 MPa, 510 bar) Maximum Working Pressure 1/4 npsm(f) x 1/4 npsm(m), PTFE seal

#### **REF PART**

NO.	NO.	DESCRIPTION	QTY
4	112725	SEAL; PTFE	1
6	189966	HOUSING, swivel	1
7		BODY not sold separately	1



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This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized Graco distributor for verification of the claimed defect. If the claimed defect is verified, Graco will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser transportation prepaid. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor, and transportation.

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